Abstract of the Disclosure

A Gas Reservoir Evaluation and Assessment Tool utilizes an Analytical Engine to produce predictions of pressure values and other production data at any point in space and at any point in time in a reservoir. A computer system, such as a workstation, stores a Gas Reservoir Evaluation and Assessment software which includes the Analytical Engine and responds to input data (which includes a reservoir description and fluid properties) by generating an output record which represents a prediction of the pressure values and other data at 'any point in space' and at 'any point in time' in a reservoir. The Analytical Engine will first calculate a pressure value in 1D for a single layer of a reservoir at a single point in space and time; it will then calculate a pressure value in 1D for multiple layers in the reservoir at the single point in space and time; it will then calculate a pressure value in 2D for the multiple layers at the single point in space and time; it will then calculate a pressure value in 3D for the multiple layers at the single point in space and time; and it will then calculate a pressure values in 3D for multiple layers not only at a single point in space but also at any future point in time.